

ABSTRACT

A proximity detector includes a fine DAC and a coarse DAC, outputs of which are summed to provide a tracking signal for tracking a magnetic field signal. The proximity detector provides two mode of operation. In a first mode of operation the coarse and fine
5 DACs operate in combination as one higher order DAC. In a second mode of operation, the coarse DAC is provided with one or more extra counts, allowing the tracking signal to move more rapidly to track a rapidly changing magnetic field signal. In another embodiment, the proximity detector also includes an offset circuit for bringing at least one of the magnetic field signal and the tracking signal towards the other one of the magnetic field signal and the
10 tracking signal.